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Part I: Overview of Business

- Dupont Pioneer exists to solve some of the world’s greatest challenges created by a rising population, a growing global middle class, and increasing demands on our planet’s resources.

Part II: Job Specifics

- Crop Genomics and the Soybean Transformation Group specifically, uses a variety of methods including the use of Agrobacterium mediated transformation and particle directed delivery for selected input traits such as insect resistance, and disease resistance and output traits like increased nutritional value.

Part III: Introduce the Problem

- Identify the most efficient genetic engineering techniques and growing conditions to deliver higher quality plants and increased quantity into the research and production pipelines

Part IV: Background

- Understanding of GMO’s
- Fundamentals of experimental design
- DNA extraction
- Bacterial DNA transformation
- Plant tissue culture
- Effect of environment on plant growth

Part V: Business Solution

- Dupont Pioneer uses the most advanced crop genomic engineering methods and precision technology to help feed the world. While maintaining the highest safety and regulatory standards.

Part VI: Student Solutions

- Students will apply their understanding of plant biotechnology and experiemntal design to better understand the importance and need for increased plant quality and quantity